ELSEVIER

Journal of Materials Processing Technology 124 (2002) 396

Journal of
Materials
Processing
Technology

www.elsevier.com/locate/jmatprotec

Author Index of Volume 124

Abdalla, H., 183
Abdel-Rahman, M., 144
Abo-Elkhier, M., 77
Aguilar, M.T.P., 384
Ahn, J.H., 267
Aksoy, M., 113
Al-Habaibeh, A., 372
Al-Hamdan, A., 83

Balo, Ş.N., 200
Bamford, J., 311
Bangwei, Z., 8
Barash, M.M., 274
Barati, M., 166
Barber, G.C., 178
Bari, M.A., 284
Brophy, B., 305
Brünig, H., 160
Byrne, G., 305

Cetlin, P.R., 384
Ceylan, M., 200
Chang, H.B., 260
Chen, G., 178
Chen, Y.-H., 19
Choi, S., 329
Corrêa, E.C.S., 384
Cotterell, M., 153, 293

Dahotre, N.B., 105
Dhande, S.G., 133
Domanti, S.A., 227
Donnarumma, A., 32
Dzan, W.-Y., 389

Edwards, G.R., 337
El-Abden, S.Z., 144
Enomoto, S., 255
Evans, C.J., 274

Fahy, M., 126
Froyen, L., 216

Gao, H., 178
Ge, C.L., 14
Ghomashchi, M.R., 345
Gindy, N., 372

Hamouda, A.M.S., 57, 209, 238
Han, K.-H., 366
Haowen, X., 8
Hejazi, J., 345
Hodgson, P.D., 329
Hsu (Xu Zuyao), T.Y., 260
Hsu, Y.-C., 67
Huang, Y.D., 216

Im, Y.-T., 366
Ioi, T., 255

Janovec, J., 293
Jung, Y.J., 49

Kang, C.G., 49
Kang, S.S., 36
Kao, H., 244
Kashyap, B.P., 259
Kato, K., 255
Kelly, K., 305
Kevin Chou, Y., 171, 274
Kim, H.Y., 267
Kim, S.H., 267
Kravtsov, A.G., 160
Kuo, H.-C., 389
Kuzucu, V., 113
Kwon, H.C., 49

Lee, S., 19
Lee, Y., 329
Liu, J.T., 260
Liu, X., 255
Lyons, C.G., 261

MacDonald, B.J., 92
Mansour, A., 183
Marczewska, I., 319
Marczewski, A., 319
Marya, M., 337
McElwain, D.L.S., 227
Mohamed, F.A., 144
Mohan, B., 297
Monaghan, J., 360

Nabhani, F., 311
Nageswara Rao, B., 259
Narayana Murty, S.V.S., 259

O'Sullivan, D., 153
Özler, L., 99

Pappalardo, M., 32
Park, D.H., 36
Pellegrino, A., 32
Pośpiech, J., 120
Prendergast, P.J., 284
Prina Mello, A., 284

Quigley, E., 360

Rajadurai, A., 297
Rakić, R., 25
Rakić, Z., 25
Ramakrishnan, N., 353
Ramalingam, S.C., 178
Ramulu, M., 244
Rao, P.N., 244
Rao, P.V.M., 133
Ruan, X.Y., 260

Saidi, A., 166
Santhanam, S., 192
Satyanarayana, K.G., 297
Schambergerova, J., 293
Shabestari, S., 345
Shah, S.V., 105
Shahverdi, H.R., 345
Shi, J., 227
Sosnowski, W., 319
Southern, W.R., 261
Srinivasan, N., 353
Swamy, N., 353

Takata, S., 267
Tiernan, S., 126
Tosun, N., 99
Turhan, H., 113
Tzeng, Y.-F., 1

Venugopal Rao, A., 353

Wang, J.-Y., 19
Wong, S.V., 57
Wu, C.-Y., 67
Wu, R.H., 260

Ye, R.C., 14

Zhandarov, S.F., 160
Zhou, L., 255
Ziegelheim, J., 293
Zorriassatine, F., 372

Elsevier Science B.V.
PII: S0924-0136(02)00478-8

ELSEVIER

Journal of Materials Processing Technology 124 (2002) 397–401

Journal of Materials Processing Technology

www.elsevier.com/locate/jmatprotec

Subject Index of Volume 124

Aircraft structures
A computational and experimental analysis of high energy impact to sheet metal aircraft structures, 92
$(Al_2O_3)p/6061$
Drilling of $(Al_2O_3)p/6061$ metal matrix composites, 244
Al–SiC
Effect of SiC and rotation of electrode on electric discharge machining of Al–SiC composite, 297
Aluminides
Microstructural analysis of interfacial reaction between molten aluminium and solid iron, 345
Aluminum
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Aluminum die casting
Laser surface-engineered vanadium carbide coating for extended die life, 105
Amorphous forming region
Effects of preparation technology on the structure and amorphous forming region for electroless Ni–P alloys, 8
ANN
A study of tool life in hot machining using artificial neural networks and regression analysis method, 99
Asperities
Some surface profiles of a strip after plane-strain indentation by rigid bodies with serrated surfaces, 227
Asymmetrical cold rolling
Analysis of asymmetrical cold rolling with varying coefficients of friction, 178
Austenite
Important factors to obtain homogeneous and ultrafine ferrite–pearlite microstructure in low carbon steel, 216
Austenitic stainless steel
Machinability of austenitic stainless steel SS303, 153
Austenitic–martensitic transformation
Effect of Be content on some characteristics of Cu–Al–Be shape memory alloys, 200
Average peak power density
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Axiomatic design
Measure of independence in soft design, 32
AZ31
Isothermal sheet formability of magnesium alloy AZ31 and AZ61, 19

Ball-shaped tools
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Bar rolling
A comparative study of microstructures and mechanical properties obtained by bar and plate rolling, 329
Biomaterials
A comparison of excimer laser etching and dry etching process for surface fabrication of biomaterials, 284
Burr minimizing
Burr reduction with a fine-scrape cutter, 255
Burr technology
Burr reduction with a fine-scrape cutter, 255

Cell biomechanics
A comparison of excimer laser etching and dry etching process for surface fabrication of biomaterials, 284
Ceramics
An improved model for the disking process, 192
Clad composite material
Finite element simulation of die design for hot extrusion process of Al/Cu clad composite and its experimental investigation, 49
CO_2 laser
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Combustion synthesis
Production of (W, Ti)C reinforced Ni–Ti matrix composites, 166
Composite coating
Laser surface-engineered vanadium carbide coating for extended die life, 105
Computational simulation
A flexible surface tooling for sheet-forming processes: conceptual studies and numerical simulation, 133
Condition monitoring system design
Comprehensive experimental evaluation of a systematic approach for cost effective and rapid design of condition monitoring systems using Taguchi's method, 372
Core material
Finite element simulation of die design for hot extrusion process of Al/Cu clad composite and its experimental investigation, 49
Corona discharge
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Corrosion
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Cracks
An improved model for the disking process, 192
Cross loading
A comparative study of microstructures and mechanical properties obtained by bar and plate rolling, 329
Cubic boron nitride
Experimental investigation on CBN turning of hardened AISI 52100 steel, 274
Cutting
An improved model for the disking process, 192
Cutting forces
Effect of misalignment on the cutting force signature in drilling, 83
Cu–Zn brass
The effect of tension/torsion strain path changes on the work hardening of Cu–Zn brass, 384

Elsevier Science B.V.
PII: S0924-0136(02)00479-X

Deep-drawing characteristics
Dependence of micro-hardness on deformation of deep-drawing steel sheets, 293
Deep-drawing steel sheets
Dependence of micro-hardness on deformation of deep-drawing steel sheets, 293
Deep-hole machining
Effect of misalignment on the cutting force signature in drilling, 83
Depth of penetration
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Design of experiments
Surface roughness model for end milling: a semi-free cutting carbon casehardening steel (EN32) in dry condition, 183
Die shape
The influence of die shape on the flow deformation of extrusion forging, 67
Differential geometry
The analysis of NC machining efficiency for marine propellers, 389
Differential scanning calorimeter
Effect of Be content on some characteristics of Cu–Al–Be shape memory alloys, 200
Diffusion
Microstructural analysis of interfacial reaction between molten aluminium and solid iron, 345
Dimensionless variables
An analytical model for the optimization of the laser bending of titanium Ti–6Al–2Sn–4Zr–2Mo, 337
Disking
An improved model for the disking process, 192
Dissolution
Microstructural analysis of interfacial reaction between molten aluminium and solid iron, 345
Drill wear
Real-time drill wear estimation based on spindle motor power, 267
Drill wear estimation
Real-time drill wear estimation based on spindle motor power, 267
Drilling
Effect of misalignment on the cutting force signature in drilling, 83
AI-based condition monitoring of the drilling process, 305
Dynamic compression test
Effect of energy losses during an impact event on the dynamic flow stress, 209
Dynamic impact test
Dynamic FEA modelling of ISO tank containers, 126
Dynamic materials modelling
CAE for forging of titanium alloy aero-engine disc and integration with CAD–CAM for fabrication of the dies, 353

Electret effect
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Electric discharge machining
Effect of SiC and rotation of electrode on electric discharge machining of Al–SiC composite, 297
Electrization
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Electrochemical
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Electroless Ni–P alloys
Effects of preparation technology on the structure and amorphous forming region for electroless Ni–P alloys, 8
Elliptical shape
Application of computer-aided process planning system for non-axisymmetric deep drawing products, 36
End milling
Surface roughness model for end milling: a semi-free cutting carbon casehardening steel (EN32) in dry condition, 183
Comprehensive experimental evaluation of a systematic approach for cost effective and rapid design of condition monitoring systems using Taguchi's method, 372
Energy losses
Effect of energy losses during an impact event on the dynamic flow stress, 209
EN32M
Surface roughness model for end milling: a semi-free cutting carbon casehardening steel (EN32) in dry condition, 183
Entropy
Measure of independence in soft design, 32
Equiaxed subgrain
A comparative study of microstructures and mechanical properties obtained by bar and plate rolling, 329
Eutectic structure
Research on self-propagating eutectic boriding, 14
Extrusion
Finite element simulation of die design for hot extrusion process of Al/Cu clad composite and its experimental investigation, 49
Extrusion forging
The influence of die shape on the flow deformation of extrusion forging, 67

FEA
Dynamic FEA modelling of ISO tank containers, 126
Feed
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Ferrite
Important factors to obtain homogeneous and ultrafine ferrite–pearlite microstructure in low carbon steel, 216
Fiber orientation
Numerical simulation of three-dimensional fiber orientation in short-fiber-reinforced injection-molded parts, 366
Fine-scrape cutter
Burr reduction with a fine-scrape cutter, 255
Finishing
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Finite element analysis
A computational and experimental analysis of high energy impact to sheet metal aircraft structures, 92
CAE for forging of titanium alloy aero-engine disc and integration with CAD–CAM for fabrication of the dies, 353
The finite element modelling of conventional spinning using multi-domain models, 360
Finite element method
The influence of die shape on the flow deformation of extrusion forging, 67
Finite element modeling
A modified method for lateral spread in thin strip rolling, 77
Finite-element program
Numerical simulation of three-dimensional fiber orientation in short-fiber-reinforced injection-molded parts, 366
Flexible surface tooling
A flexible surface tooling for sheet-forming processes: conceptual studies and numerical simulation, 133
Fracture
An improved model for the disking process, 192

Frictional coefficient ratio
Analysis of asymmetrical cold rolling with varying coefficients of friction, 178
Fuzzy expert system
A fuzzy logic based expert system for machinability data-on-demand on the Internet, 57

Gaussian curvature
The analysis of NC machining efficiency for marine propellers, 389

H13 steel
Laser surface-engineered vanadium carbide coating for extended die life, 105
Hard turning
Experimental investigation on CBN turning of hardened AISI 52100 steel, 274
Heat flow
An analytical model for the optimization of the laser bending of titanium Ti–6Al–2Sn–4Zr–2Mo, 337
High manganese steel
A study of tool life in hot machining using artificial neural networks and regression analysis method, 99
High-speed milling
Burr reduction with a fine-scrape cutter, 255
High-temperature oxidation
Laser surface-engineered vanadium carbide coating for extended die life, 105
Hip protector
Mechanical testing of hip protectors, 311
Hot machining
A study of tool life in hot machining using artificial neural networks and regression analysis method, 99

Image processing
Effect of misalignment on the cutting force signature in drilling, 83
Impact
A computational and experimental analysis of high energy impact to sheet metal aircraft structures, 92
Impact forces
Mechanical testing of hip protectors, 311
Intelligent
AI-based condition monitoring of the drilling process, 305
Intermetallics
Microstructural analysis of interfacial reaction between molten aluminium and solid iron, 345
Internal surfaces
Finishing of non-ferrous internal surfaces using ballizing technique, 144
ISO tank containers
Dynamic FEA modelling of ISO tank containers, 126
Isothermal sheet forming
Isothermal sheet formability of magnesium alloy AZ31 and AZ61, 19

Large deformation
CAE for forging of titanium alloy aero-engine disc and integration with CAD–CAM for fabrication of the dies, 353
Laser bending
An analytical model for the optimization of the laser bending of titanium Ti–6Al–2Sn–4Zr–2Mo, 337
Laser surface engineering
Laser surface-engineered vanadium carbide coating for extended die life, 105
Leaded-tin bronze
A note on the effect of phosphorus on the microstructure and mechanical properties of leaded-tin bronze, 113
Liquid metal corrosion
Laser surface-engineered vanadium carbide coating for extended die life, 105
Loading path
A comparative study of microstructures and mechanical properties obtained by bar and plate rolling, 329
Low carbon steel
Important factors to obtain homogeneous and ultrafine ferrite–pearlite microstructure in low carbon steel, 216

Machinability data selection
A fuzzy logic based expert system for machinability data-on-demand on the Internet, 57
Machinability rating
Machinability of austenitic stainless steel SS303, 153
Machining
Surface hardening of AISI 4340 steel by machining: a preliminary investigation, 171
Machining data
A fuzzy logic based expert system for machinability data-on-demand on the Internet, 57
Manufacturing
An improved model for the disking process, 192
MaxEnt
Measure of independence in soft design, 32
Mechanical properties
A note on the effect of phosphorus on the microstructure and mechanical properties of leaded-tin bronze, 113
Mechanical testing
Mechanical testing of hip protectors, 311
Melt-spun fibers
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Metal cutting
Effect of misalignment on the cutting force signature in drilling, 83
Metal flow
The influence of die shape on the flow deformation of extrusion forging, 67
Metal matrix composite
Effect of SiC and rotation of electrode on electric discharge machining of Al–SiC composite, 297
Metal spinning
The finite element modelling of conventional spinning using multi-domain models, 360
Metalworking fluid
Tribological aspects of the choice of metalworking fluid in cutting processes, 25
Micro-hardness
Dependence of micro-hardness on deformation of deep-drawing steel sheets, 293
Micromanufacturing
A comparison of excimer laser etching and dry etching process for surface fabrication of biomaterials, 284
Microstructure
A note on the effect of phosphorus on the microstructure and mechanical properties of leaded-tin bronze, 113
Microstructural analysis of interfacial reaction between molten aluminium and solid iron, 345
Microtextured
A comparison of excimer laser etching and dry etching process for surface fabrication of biomaterials, 284
Miedema model
Effects of preparation technology on the structure and amorphous forming region for electroless Ni–P alloys, 8
Milling machine
Tribological aspects of the choice of metalworking fluid in cutting processes, 25

Misalignment
Effect of misalignment on the cutting force signature in drilling, 83
Monitoring
AI-based condition monitoring of the drilling process, 305

NaCl
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Nanobiotechnology
A comparison of excimer laser etching and dry etching process for surface fabrication of biomaterials, 284
Nd:YAG laser
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Neural networks
Comprehensive experimental evaluation of a systematic approach for cost effective and rapid design of condition monitoring systems using Taguchi's method, 372

ODF
Numerical simulation of three-dimensional fiber orientation in short-fiber-reinforced injection-molded parts, 366
Optimization
Sensitivity based optimization of sheet metal forming tools, 319
An analytical model for the optimization of the laser bending of titanium Ti–6Al–2Sn–4Zr–2Mo, 337

Parallel processing
The finite element modelling of conventional spinning using multi-domain models, 360
Part assembly
The study of a passive accommodation device in robotic insertion processes, 261
Path interval
The analysis of NC machining efficiency for marine propellers, 389
Phase transformation
Surface hardening of AISI 4340 steel by machining: a preliminary investigation, 171
Planar anisotropy
A modified method for lateral spread in thin strip rolling, 77
Polarisation
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Poly(methylmethacrylate)
The influence of humidity on the deformation and fracture behaviour of PMMA, 238
Polycrystalline diamond
Drilling of (Al_2O_3)p/6061 metal matrix composites, 244
Preform
Application of computer-aided process planning system for non-axisymmetric deep drawing products, 36
Preparation technology
Effects of preparation technology on the structure and amorphous forming region for electroless Ni–P alloys, 8
Pressure side
The analysis of NC machining efficiency for marine propellers, 389
Process control
Method of planning draughts for a cold-rolled strip, 120
Process plan
Application of computer-aided process planning system for non-axisymmetric deep drawing products, 36
Production rules
Application of computer-aided process planning system for non-axisymmetric deep drawing products, 36
Pulse duration
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Pulse energy
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Punch–die pressing
Isothermal sheet formability of magnesium alloy AZ31 and AZ61, 19

Regression analysis
A study of tool life in hot machining using artificial neural networks and regression analysis method, 99
Relative humidity
The influence of humidity on the deformation and fracture behaviour of PMMA, 238
Remote centre compliant devices
The study of a passive accommodation device in robotic insertion processes, 261
Response surface methodology
Surface roughness model for end milling: a semi-free cutting carbon casehardening steel (EN32) in dry condition, 183
Robotics
The study of a passive accommodation device in robotic insertion processes, 261
Roll pass analysis
Method of planning draughts for a cold-rolled strip, 120
Rotation of electrode
Effect of SiC and rotation of electrode on electric discharge machining of Al–SiC composite, 297
Rubber-like material
A flexible surface tooling for sheet-forming processes: conceptual studies and numerical simulation, 133

Scanning electron microscopy
Drilling of (Al_2O_3)p/6061 metal matrix composites, 244
Self-propagating eutectic boriding
Research on self-propagating eutectic boriding, 14
Sensitivity
Sensitivity based optimization of sheet metal forming tools, 319
Sensory fusion
Comprehensive experimental evaluation of a systematic approach for cost effective and rapid design of condition monitoring systems using Taguchi's method, 372
Shape memory properties
Effect of Be content on some characteristics of Cu–Al–Be shape memory alloys, 200
Sheath material
Finite element simulation of die design for hot extrusion process of Al/Cu clad composite and its experimental investigation, 49
Sheet metal forming
Sensitivity based optimization of sheet metal forming tools, 319
Sheet-forming processes
A flexible surface tooling for sheet-forming processes: conceptual studies and numerical simulation, 133
SHS
Production of (W, Ti)C reinforced Ni–Ti matrix composites, 166
Slab method
Analysis of asymmetrical cold rolling with varying coefficients of friction, 178
Slip line theory
Some surface profiles of a strip after plane-strain indentation by rigid bodies with serrated surfaces, 227
Soft Computing
Measure of independence in soft design, 32
Soft design
Measure of independence in soft design, 32

Software
Method of planning draughts for a cold-rolled strip, 120
Speed
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Spindle motor power
Real-time drill wear estimation based on spindle motor power, 267
Spontaneous polarization
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Spot size
Effects of process parameters on the corrosion rate of pulsed Nd:YAG laser-welded zinc-coated steel, 1
Spread rolling
A modified method for lateral spread in thin strip rolling, 77
Step-over distance
The analysis of NC machining efficiency for marine propellers, 389
Strain path
The effect of tension/torsion strain path changes on the work hardening of Cu–Zn brass, 384
Strain-assisted transformation
Important factors to obtain homogeneous and ultrafine ferrite–pearlite microstructure in low carbon steel, 216
Stress–strain
Effect of energy losses during an impact event on the dynamic flow stress, 209
Strip rolling
Method of planning draughts for a cold-rolled strip, 120
Structure
Effects of preparation technology on the structure and amorphous forming region for electroless Ni–P alloys, 8
Surface hardening
Surface hardening of AISI 4340 steel by machining: a preliminary investigation, 171
Surface roughness
Finishing of non-ferrous internal surfaces using ballizing technique, 144
Surface roughness model for end milling: a semi-free cutting carbon casehardening steel (EN32) in dry condition, 183

Taguchi's orthogonal arrays
Comprehensive experimental evaluation of a systematic approach for cost effective and rapid design of condition monitoring systems using Taguchi's method, 372
Temper rolling
Some surface profiles of a strip after plane-strain indentation by rigid bodies with serrated surfaces, 227
Tensile deformation
The influence of humidity on the deformation and fracture behaviour of PMMA, 238
Thermally stimulated current
Analysis of the polarization state of melt-spun polypropylene fibers, 160
Thermite
Research on self-propagating eutectic boriding, 14
Thermomechanical process
Surface hardening of AISI 4340 steel by machining: a preliminary investigation, 171
(Ti, W)C composites
Production of (W, Ti)C reinforced Ni–Ti matrix composites, 166
Titanium
An analytical model for the optimization of the laser bending of titanium Ti–6Al–2Sn–4Zr–2Mo, 337
Titanium alloy
CAE for forging of titanium alloy aero-engine disc and integration with CAD–CAM for fabrication of the dies, 353
Titanium carbide
Production of (W, Ti)C reinforced Ni–Ti matrix composites, 166
Tool life
A study of tool life in hot machining using artificial neural networks and regression analysis method, 99
Tool wear
Experimental investigation on CBN turning of hardened AISI 52100 steel, 274
Tools design
Sensitivity based optimization of sheet metal forming tools, 319
Tribological aspects
Tribological aspects of the choice of metalworking fluid in cutting processes, 25
Turbine disc forging
CAE for forging of titanium alloy aero-engine disc and integration with CAD–CAM for fabrication of the dies, 353

Ultrafine-grained microstructure
Important factors to obtain homogeneous and ultrafine ferrite–pearlite microstructure in low carbon steel, 216
Uncertainty
Measure of independence in soft design, 32

Wedge cutting
Some surface profiles of a strip after plane-strain indentation by rigid bodies with serrated surfaces, 227
Work hardening
Machinability of austenitic stainless steel SS303, 153
The effect of tension/torsion strain path changes on the work hardening of Cu–Zn brass, 384

X-ray diffraction
Effect of Be content on some characteristics of Cu–Al–Be shape memory alloys, 200